

Deriscope

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1. *Sulphurous Oxide Poisoning*.—Köster reports four cases of carbon bisulphide poisoning occurring in workers in a vulcanizing factory. The first patient, a girl of twenty-two, first noted symptoms after she had been working for two years. The legs became cold and weak; there was difficulty in walking; a heavy feeling in the head, and a sensation of intense cold in the feet. Later she had an attack resembling drunkenness, with emotional disturbance. The breath was offensive and there was a disagreeable odor to the skin. The pain sense in the hands was diminished; the patellar jerks were increased; there was bilateral peroneal paralysis, giving rise to the steppage gait, with reactions of degeneration in the peroneal muscles. The second case, a woman of twenty-three, had similar symptoms in the legs, diminished patellar reflexes; diminished electrical reactions in the extensors of the arms and legs. There was a distinct odor of carbon bisulphide from the mouth, loss of sensation to pain and touch in the third and fourth fingers of both hands, and areas of hypesthesia in the feet. The electrical reactions were diminished in all the muscles. The third case, a woman of twenty-one, has worked for two and a half years. She suffered first from headache, was emotional, and there was a tremor of the limbs which disappeared after two months absence from work. The knee jerks were exaggerated; there was diminution in the electrical reactions. The fourth case, a woman of twenty-three, had been exposed for one year and a quarter before symptoms developed. She had first headache; a feeling of drunkenness; the breath had a distinct odor of carbon bisulphide; there was great fatigue in walking, and a distinct Romberg's symptom. There was also increase in the reflexes with patellar and foot clonus, and diminished electrical reactions in all the muscles. Köster describes the symptoms, calling particular attention to the intoxication that indicates involvement of the cerebral hemispheres. The method by which carbon bisulphide is introduced into the system is probably inhalation. There appears to be a gradual development of the symptoms, indicating a summation of the toxic effects. There does not appear to be a particular predilection for the motor nerves of the extensor muscles of the arm; indeed, no part of the nervous system appears to be immune to the poison. There is also doubtless centric disturbance affecting particularly sensation. Köster combats energetically the idea that carbon bisulphide intoxication

produces merely trivial and temporary alteration in the nerves; he regards it as a severe form of poisoning.

2. *Sensations and the Cortex*.—Bonhoeffer reports a series of interesting cases. A man of twenty-four, as a result of epilepsv. had had an operation in which the pial veins in the middle part of the Rolandic region were tied. There was disturbance of the stereognostic sense, of the sense of localization, and improvement in the epilepsy. There was also slight disturbance of the touch and size perception. The second patient, a man of twenty-four, had an injury of the brain, with depressed fracture in the Rolandic region. There was paresis of the right hand and a sense of cold. The sense of touch and the stereognostic sense were good, but after the operation the sense of touch was impaired, and astereognosis was present. The third patient, a man of thirty, had an injury to the skull, causing a depression at the junction of the parietal and frontal bones. He had at first paralysis of the right side, with aphasia; later he recovered from this, but developed epilepsy. There was a sensation of cold in the right hand, some impairment of the sense of touch and pain localization, and very slight impairment of the stereognostic sense. The fourth case, a man of thirty-three, had a depression of the right parietal bone as a result of injury. The left hand showed motor deficiency and tremor. There was astereognosis, apparently due to the impaired movements of the thumb. The fifth case, a man of fifty-one, suddenly developed aphasia, with weakness of the right hand. There was complete astereognosis, loss of the muscular sense, some disturbance of the localization sense. In cortical lesions, therefore, it appears that sensation is usually disturbed in the distal portions of the thumbs. It may involve also certain fingers; often there is disturbance of the sense of localization, position, movement, and stereognostic sense. He discusses the nature of astereognosis, and also the benefits likely to be derived from operation, which he considers are not great if the brain is actually involved.

3. *Neuropathological Considerations*.—Bernhardt calls attention to some early publications of his own and of others, of cases of polyneuritis in which reactions of degeneration were found in the muscles not subject to paralysis. He also mentions some other curious cases he has observed and published, characterized by loss of electrical irritability of the nerves and muscles, with preservation of their functional power. In explanation of these conditions he suggests that under the influence of certain toxic processes the injury to the nerve fibre may remain limited to certain peculiar pathological changes that may be transient. The paper concludes with some considerations of the spinal neuritic form of progressive muscular atrophy.

4. *Hemiatrophy of Tongue*.—Landau reports the following cases: First, a man of thirty-six, who had had epileptic attacks for six years, developed atrophy of the right half of the tongue, with diminished electrical reactions in this portion. There was chronic tremor of the left leg. The left hand was slightly weaker than the right. The case is one of cerebral syphilis. Second, a man of twenty-three, ten months previously had had paresthesia in the right arm, followed by vertigo and right hemiparesis. There was difficulty in swallowing, and shortly after this he noticed atrophy of the right half of the tongue. There was no disturbance of taste or of the movements of the tongue, and the electrical reactions of its muscles were normal. A diagnosis was made of some disturbance of circulation in the internal capsule, probably a syphilitic endoarteritis, although no improvement was made as a result of anti-syphilitic treatment. Third case, a man of thirty-four, two and a half years before observation after exposure, had had severe pain in the back, followed by paraparesis, from which he recovered. Three months later there was left facial palsy with loss of speech. Later he again lost power in his legs. The left half of the tongue was atrophied, and there was partial reaction of degeneration in the left side of the face and tongue. The diagnosis in this case was diffi-

cult, but Landau believes that the lumbar enlargement of the spinal cord was affected, probably as a result of previous syphilitic meningomyelitis; that the roots in the upper portion of the spinal cord were also involved. He believes that hemiatrophy of the tongue is more frequently due to peripheral, than to central, lesions. Among the other manifestations of this unilateral disease of the tongue are thickening of the speech and tremor.

5. *Ophthalmoplegic Migraine*.—A girl of seventeen, at the age of seven, had attacks of intense pain located in the right eye and right forehead. The attacks often lasted for from ten days to two weeks. After the short attacks there were no further symptoms, but after the long attacks there was ptosis of the right eye. They occurred three or four times a year. The examination showed that after an attack there was hyperesthesia in the distribution of the right branch of the trigeminus, associated with amaurosis of the left eye, which sometimes lasted several weeks. There was paresis of the oculomotor nerve. Von Kollarits believes that there is an organic basis of ophthalmoplegic migraine. Why the attacks occurred without following palsy is difficult to explain, but possibly there is, adjacent to the seat of migraine pain, an area of nerve tissue poorly developed, that sometimes is involved, sometimes not, by the attack of migraine.

6. *Pia Sarcomatosis*.—After discussing the extraordinary rarity of tumors of the meninges, Rindfleisch describes a case characterized by pain in the back, weakness and stiffness in the legs, with paroxysmal painful contractures. Later the weakness involved the arms. There was retention of urine, and partial incontinence of feces. There was atrophy of the muscles, and diminished perception of all forms of sensation. The patient was removed from observation before death. The diagnosis of multiple tumors of the meninges seemed to be confirmed by the lumbar puncture. Pressure was normal, the color of the fluid was dark brownish-yellow, the albumin was 2.4 per mille, and there were some white cells in the sediment. The second case, a girl of ten, had headache, vertigo, unsteady gait, and finally, convulsions. These were followed by blindness and vomiting, but the patient, in addition to the headache, had severe pain in the back. There was papillitis and finally death. Lumbar puncture showed a high intracerebral pressure. At the autopsy a small round celled sarcoma of the pia arachnoid of the brain and spinal cord was found. The third patient, a woman of twenty-one, had had syphilis three years previously. There were some symptoms of meningitis, with remission and then increased severity. The cerebrospinal fluid was under high pressure; it coagulated and contained large cells with a single pale nucleus. Later there was paralysis of the right side of the face, and continuation of the pain in the head and back. At the autopsy a delicate membrane was found covering the pia, which consisted of tumor tissue, apparently a vascular round-celled sarcoma. Rindfleisch believes that these three cases represent a form of sarcomatous meningitis. This disease is characterized by somewhat atypical signs of meningitis, a rather longer course than meningitis indicates, and a peculiar characteristic of the cerebrospinal fluid, which is often brownish-yellow in color, and in the one case carefully examined in this respect, contained cells which presumably were derived directly from the tumor. The diagnosis is difficult, and was not made certainly in any of the cases. The prognosis is, of course, fatal.

7. *Spinal Cord Exhaustion*.—Bing discusses the theories in regard to tabes, and believes that the theory of substitution or exhaustion furnishes the best solution, if we combine with it an electivity of specific noxious factors. He then discusses hereditary ataxia, which he considers is best explained by supposing a hyperplastic primary condition, and insufficient substitution of the material consumed by functional activity. The paper is purely theoretical.

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